The Federal Geospatial Data Committee (FGDC) Standards Endorsement Process

The Federal Geospatial Data Committee (FGDC) develops geospatial data standards that facilitate the development, sharing, and use of geospatial data in cooperation with State, local, and tribal governments, the private sector, and the academic community. It also cooperates to the extent feasible with the international community. FGDC standards are designed to support the National Spatial Data Infrastructure (NSDI) and are expected to: (1) be within the purview and scope of the objectives of the FGDC; (2) be future focused, meaning that FGDC standards are intended to remove impedances to sharing information rather than changing existing successful data sharing arrangements; (3) be developed and presented in a structured manner that will lead to understandability and usability by consumers; (4) not constrain technology development; (5) be integrated with one another and with related standards; (6) evolve as technology and institutional mandates change; (7) allow for evolution and will accommodate backward compatibility for information gathered under previously known standards; (8) be supportable by the geospatial vendor community; (9) be publicly available; and (9) be complete in terms of their standards components and methodology.

The Federal Geographic Data Committee (FGDC) Steering Committee is the policy-level interagency group responsible for overseeing the Office of Management and Budget (OMB) Circular A-16 (Coordination of Geographic Information and Related Spatial Data Activities) activities and the implementation of the NSDI. The Steering Committee provides executive leadership for the coordination of federal geospatial activities among agencies by establishing policy and providing guidance and direction to the member agencies.

The FGDC Coordination Group operates at the working level and is comprised of chairpersons of the thematic Subcommittees and 'cross-cut' Working Groups, and representatives from Federal agencies and FGDC recognized stakeholder groups. The Coordination Group facilitates the coordination of federal geospatial activities among agencies to eliminate duplication of effort and data, avoid redundant expenditures, reduce resources spent on unfunded mandates, and leverage geospatial investments. Through the Coordination Group's outreach and communication efforts, the FGDC involves state, local and tribal governments, academia, the private sector, professional societies, and others in the development and implementation of the NSDI.

To effectively address specific geospatial issues at a more granular level of detail, the FGDC is organized into smaller subcommittees and working groups. FGDC subcommittees are comprised of representatives from Federal agencies and FGDC recognized stakeholder groups who share a common interest in a specific type of geospatial data - typically those geospatial data themes specified by OMB Circular A-16. Each subcommittee focuses on issues that pertain to coordination and standards associated with a geospatial data theme, including data collection, access, exchange, and applications using those data.

A number of non-federal organizations serve as Collaborating Partners in the FGDC standards process. Collaborating Partners are encouraged to participate on subcommittees and working groups and provide input into all decisions.

All FGDC Subcommittees and Working Groups have representation on the FGDC Standards Working Group (SWG). The SWG promotes and coordinates FGDC standards activities, and provides guidance on FGDC standards policy and procedures. It also facilitates coordination between subcommittees having overlapping standards activities, and reviews and makes recommendations on the approval of standards proposals, draft standards for public review, and draft standards for FGDC endorsement.

FGDC Standards Approval Process begins when a new National Spatial Data Infrastructure (NSDI) standards project proposal is submitted to the SWG, which distributes the proposals to the chairs of each FGDC Subcommittee and Working Group. The SWG, with input from the FGDC Subcommittees and Working Groups, evaluates the standard project proposal. If the results of the review are positive, the SWG then sends it out for public comment. After considering the comments received, the relevant Subcommittee or Working Group may then decide to establish the project and standards development is begun. When no appropriate subcommittee or working group exists, the SWG will identify the need for the creation of a new subcommittee or working group and make a recommendation to the Coordination Group.

After the appropriate Subcommittee or Working Group is identified, a project leader is then assigned by the Subcommittee or Working Group to lead the activity. A subgroup of the Subcommittee or Working Group may be formed to develop the standard. This group is the Standards Development Group. The Standards Development Group the proceeds with standard development. The Standards Development Group determines the development approach, identifies existing related standards and standards development activities, and assesses their relevance to the standards project in accordance with OMB Circular A-119. Where feasible, existing specifications (whether international, national, agency, or de facto standards) are adopted. If no suitable standard exists, the Standards Development Group may consider adapting an existing standard as the basis for a new standard. When adoption or adaptation of existing standards are inappropriate or insufficient, the Standards Development Group may then begin development of a new standard. The Standards Development Group may involve representatives outside FGDC and the Federal government in the development process.

The Standards Development Group assigned to the project then develops a Working Daft for pre-public review. At this point, the standard receives comments and input from as many constituent groups as possible, including the sponsoring FGDC Subcommittee or Working Group. The Subcommittee or Working Group may choose to obtain comments from other Federal and non-Federal groups that would be effected by the Working Draft, but at this stage the review is targeted and does not constitute an open, public review of the standard. The Working Draft is then revised as needed and the standard becomes a Committee Draft.

The SWG evaluates the Committee Draft. If approved, the SWG sends the Committee Draft and a recommendation to advance the standard to public comment to the FGDC Coordination Group The FGDC Coordination Group then reviews the recommendation of the SWG and may approve standard for public review.

If approved by the Coordination Group, the FGDC Secretariat then announces and coordinates a public review of the Proposed FGDC Standard. At a minimum, the Proposed Standard is announced in the Federal Register with a request for comments. The announcement may also be published in professional journals, in trade magazines, and on the Internet to obtain the widest possible public exposure.

Testing of the Proposed FGDC Standard is done as part of the public review. This may be coordinated by the Standards Development Group. Test results become part of the information contained in the public review submitted to the FGDC Secretariat. All comments are directed to the FGDC Secretariat, which forwards the comments to the Standards Development Group upon completion of the review period.

When the public review process is completed, the relevant Standards Development Group reviews all comments received and produces a revised standard as well as a Public Response Document. If there are substantial changes to the review version of the standard, the standard may require another public review. Results from testing and validation of the standard are also documented. The SWG then examines the revised Proposed FGDC Standard and the Public Response Document and makes a determination if the Proposed Standard along with a recommendation for adoption should be sent to the FGDC Coordination Group.

The FGDC Coordination Group reviews the recommendation of the SWG. If the SWG's recommendation is approved, the Proposed FGDC Standard is then forwarded to the FGDC Steering Committee for formal adoption. The FGDC Steering Committee reviews the recommendation of the FGDC Coordination Committee and (if appropriate) endorses the standard. Approved FGDC Standards are then submitted for final publication and public release.

Geospatial data standards that have been identified and approved through this extensive public/private sector review process are considered to have been successfully validated. No further review by NIST will be undertaken.

For further information on the geospatial data standards process, interested parties are encouraged to visit its website at: http://www.fgdc.gov.